

### Determining Levels of Additional Review Guidance

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Per Section 21 of the Site Remediation Reform Act (C.58:10C-21), the department shall inspect all documents and information submitted by a licensed site remediation professional concerning a remediation upon receipt. The department may provide additional review of any document submitted for the remediation of a contaminated site upon a determination that: (1) the licensed site remediation professional did not comply with the provisions of section 16 of P.L.2009, c.60 (C.58:10C-16); (2) any deficiencies, errors or omissions will result in an inability to determine if the remediation is protective of the public health, safety, or the environment; or (3) the remediation will not be protective, of the public health, safety, or the environment.

In addition, executive order 140 states, "at sites where groundwater has been impacted by pollutants above remediation standards, or where the site may be used as residential housing, or for educational purposes, including use as a child care or day care center, a public, private, or charter school, or a playground or ball field, the DEP shall increase its auditing, monitoring, and review of conditions at the site, including the performance of on-site inspections, and its inspection of the LSRP's submissions to ensure that public health, safety, and the environment are protected as the Site Remediation Program transitions to a compliance and enforcement role."

This guidance document has been created to insure that these mandates are met including a bias towards receptors and certain areas of concern that, in the past, had a high probability of having problems. The flow charts were created to obtain consistency. Every attempt was made to meet the requirements in the order but every possible scenario that could exist at a site was not considered. The flow charts are intended to cover the most common scenarios.

At each phase the Section Chief/Supervisor will inspect the Key Document form, the Receptor Evaluation and the Case Inventory Document. Instructions on the chart refer to all three documents. A determination has to be made if the information submitted on the three forms is possible, consistent and, in your experience, reasonable.

When creating the flow charts, it was assumed that each key document would be submitted separately. It will be necessary when reviewing multiple submittals at one time, to use your professional judgment to avoid duplicative reviews.

It should be noted that these charts are meant to be guidance and that the Section Chief/Supervisor has the discretion to have any report reviewed, any time there is justification. If in doubt, do a general review.

Most of the questions on the forms are not utilized as decision points in the flow charts. However, any information provided on the form may prompt the Section Chief/Supervisor to request additional review. The specific types of reviews indicated on the charts are recommendations. You can decide to change or add a review. Also, if the flow chart recommends numerous component reviews, you can decide to do a comprehensive review.

## General Rules

There are some situations that will always require a general review. The first is if this is the first report that is being submitted by a particular LSRP. To determine if it is the first submittal check the LSRP Inspector's Fact Sheet, which must be generated in NJEMS. All initial submittals must get a general review.

The second is if state monies are being used to remediate the site. If a grant or loan has been issued, then it is necessary to conduct a general review of the work plan submitted. Additional monies will not be released if it is determined that the work proposed is excessive, unnecessary, or not in compliance with the initial scope of work, regulations and/or guidance. As a reminder, it is necessary to contact the fund case manager after the completion of all fund-related reports.

All potable well and indoor air data is supposed to be submitted with the appropriate form to be reviewed by the Office of Data Quality within 60 days of collection of the samples. If you find this type of data in the report, immediately forward it to the Office of Data Quality.

All Permit by Rules (PBR) requests are supposed to be submitted with the appropriate form to be reviewed by the Bureau of Ground Water Pollution Assessment. If you find this type of permit in the report, immediately forward it to the Bureau of Ground Water Pollution Assessment.

The Section Chief/Supervisor must also determine if deficiencies identified in the previous submittal have been addressed by checking NJEMS (LSRP Inspector's Fact Sheet, LSRP Key Document Remarks and NJEMS Yellow Sticky Notes). For example if it was determined in a previous submittal that a ground water investigation was needed, it is necessary to confirm that a ground water investigation was conducted and the results are submitted in the current report. It is up to the discretion of the Section Chief/Supervisor if a component review of the response to the deficiency, in this case a ground water investigation, is necessary. Note: NJEMS Yellow Sticky Notes merge into the LSRP Inspector's Fact Sheet.

The Section Chief/Supervisor must also check to see if a new LSRP had been hired since the last submittal by checking the LSRP Inspector's Fact Sheet in NJEMS. This can be considered when determining if additional review is necessary and the level of the review.

The fee for each case is required to be submitted annually. Whether all of the required fees have been paid should be noted but inspections and reviews should be conducted regardless. Lack of payment should be noted in any conversation/email with the LSRP/RP.

CAS will close out areas of concern in NJEMS with the submittal of the Annual Remediation Fee Reporting Form. RP's will be doing this to reduce the amount they will

have to pay. The Case Inventory Document should be reviewed to make sure that this information is correct.

The reviewer should note the lack of payment or incorrect fess assessment in any conversation/email with the LSRP and/or RP. A follow-up "fee" letter needs to be sent to the RP with a copy to the LSRP. The "fee" letters will be generated via NJEMS.

If the flow chart indicates that a component review is necessary for a particular part of the case, then it is necessary to continue to review the flow chart to determine if any additional triggers exist for any other types of reviews.

### Preliminary Assessment Report Only

The first thing to determine is whether any areas of concern were identified. Section H2 of the Preliminary Assessment Site Investigation Report form details all possible areas of concern. If any areas of concern were identified, then proceed to the chart for PA/SI. This flow chart is only to be used when only a Preliminary Assessment Report is submitted.

When inspecting a Preliminary Assessment Report, it is necessary to determine if a site inspection was conducted. If there is no date in Section G1 of the Preliminary Assessment/Site investigation form indicating when a site inspection was conducted then a comprehensive review of the document should be conducted. The date when the site inspection was conducted should also be taken into consideration. An accurate determination on the number of Areas of Concern and the conditions of the Areas of Concern can not be determined if a site inspection was not conducted or if the site inspection was conducted more than one year prior to the finalization of the Preliminary Assessment Report.

The next thing to consider is what are the current site operations and what were the past operations. If Section H1 of the Preliminary Assessment/Site Investigation form indicates that either the current or past operations included dry cleaning, agriculture or any industrial activity and no areas of concern were identified, then a general review should be conducted. Based upon the Department's experience, review of these types of operations should have identified at least one area of concern.

If an inspection was performed and if the type of operations identified in the previous paragraph are/were not conducted at the site, then no review of the report will be necessary.

### Preliminary Assessment/Site Investigation

When inspecting a Preliminary Assessment Site Investigation Report, it is necessary to determine if a site inspection was conducted. If there is no date in Section G1 of the Preliminary Assessment/Site investigation form (PA/SI) indicating when a site inspection was conducted then a comprehensive review of the document should be conducted. The date when the site inspection was conducted should also be taken into consideration. An accurate determination on the number of Areas of Concern and the conditions of the Areas of Concern can not be determined if a site inspection was not conducted or if the site inspection was conducted more than one year prior to the finalization of the Preliminary Assessment Site Investigation Report.

If additional remediation at the site/area of concern is not being proposed then review the compliance check section of the PA/SI form (section H5 - b, 1-8 and H5-c and H5-d) to determine if any questions were answered with "yes". This section was included on the form to insure the LSRPs have compared the analytical results of their findings in the SI to all the appropriate standards, screening levels and MDLs. It also identifies if any alternate or site specific standards were established. If the answer to any of the questions is "yes", then a component review of that issue should be conducted.

The next decision point is an evaluation of certain sensitive current or future property uses. To do this, a review should be conducted in Section D of the Preliminary Assessment/Site Investigation form to determine if the Current or Future Use is a School, Child Care Center, residential, or Park/Recreational use. If it is, then a general review should be conducted.

If the site is not or will not be used by a sensitive population then a review of the AOCs identified in section H2 of the PA/SI form should be performed to determine if any of the following twelve AOCs have been reported:

Areas which receive flood or storm water from potentially contaminated areas (3.), Drywells and sumps (9.), Floor drain collection system (12.), Former agricultural applied pesticide area (13.), Historic fill or any other fill material (15.), Landfills or landfills (18.), Piping, above ground and below ground pumping stations, sumps and pits (22.), Process area sinks and piping which receive process waste (23.), Septic systems, leachfields or seepage pits (26.), Surface impoundments and lagoons (32.), Underground piping including industrial process sewers (34.), and. Underground storage tanks and associated piping (35.).

These AOCs represents the areas which, based on the Department's experience, are typically sources of discharges not easily identified from visual inspection. If one or more of the twelve AOCs are identified then check to see if a ground water investigation was performed. This information is found in H5-b3 on the PA/SI form. If a ground water investigation was conducted but there were no results above the Ground Water Quality Standards then, according to the instructions, "no" should be selected, if ground water was not sampled then "NA" should be selected. If a ground water investigation

was performed then a component review should be conducted to determine why ground water was sampled when soil contamination was not reported.

Regardless of whether the twelve areas were identified or if there was a ground water investigation, it is necessary to check section I to determine if there was a variance/deviation from the regulations. If there was, a component review of the variance/deviation should be performed. If not, then no additional review of the report is necessary.

If a PA/SI is submitted, an inspection was conducted and additional work is proposed for any AOC or the site then a general review should be conducted if Section D of the Preliminary Assessment/Site Investigation form indicates that the Current Use is a School, Child Care Center, residential, or Park/Recreational use.

If current use is not a School, Child Care Center, residential, or Park/Recreational use, then determine if ground water was impacted by checking H5-a. If ground water was impacted and the future use of the site is School, Child Care Center, residential, or Park/Recreational use or a potable well was indicated on G 7 then a general review should be conducted.

If these conditions were not met then a review does not need to be conducted.

#### B. SI AOC ONLY Flow Chart (see submittal type in section E of the PA/SI form)

If an SI is submitted to address one or more AOCs but does not include a PA then start the evaluation at the RI/RA proposed section of the flow chart and follow the directions above only eliminating the questions regarding whether a site inspection was conducted.

### Remedial Investigation Report

It is necessary to determine if the site contains Radionuclides, Ordnance and Explosives/unexploded ordnance (OE/UXO), or chromate production wastes by checking the soils section of question 4 in Section F. If so, the documents should be transferred to a specialized group for review.

The form should be checked to see if all contaminants have been delineated in all media. If not, then a general review should be conducted to determine why they submitted the report.

If there are sensitive receptors specified on B1 of the receptor evaluation form or if future use may be residential, school, child care, park/recreation on C of Remedial Investigation Report Form, then a General Review should be performed.

The flowchart then indicates seven (7) areas that should be investigated. If any of these areas are identified then a component review of that area should be conducted. If more than one scenario exists at the site, a component review should be conducted on all areas. If numerous component reviews are identified then a comprehensive review should be conducted.

1. Are ecological impact identified in question F2 of the Receptor Evaluation Report?
2. Is Impacted Class I Groundwater identified in F1 and the second question in G of the Remedial Investigation Report Form?
3. Has any response been indicated in D3 of the Receptor Form?
4. Are there receptors for VI identified in E2 or E3 of the Receptor Form?
5. Is Arsenic, Dioxin, Mercury or PCBs present in sediments above ecological screening levels As specified in F1 of the Remedial Investigation Report Form?
6. Is anything other than "Default" checked in G of the Remedial Investigation Report Form?
7. Has H2 of the Remedial Investigation Report Form been checked "indicating that "all or any part of the ground water contamination is migrating onto this site per N.J.A.C. 7:26E-3.7(g)" or that "soil contamination is naturally occurring per N.J.A.C. 7:26E-3.10"?

If after undergoing the above evaluation it is determined that none of the above criteria were met, then either the NJDEP will await the submission of the Remedial Action Workplan (RAW) or if the RAW has been submitted along with the RI Report then an evaluation as per the RAW Flow Chart should follow.

more than 1 one

## Remedial Action Work Plan

One of the first criteria that is looked at in the PA, SI, and RI flow charts is receptor information. The receptor information is not at the start of the RAW flow chart for several reasons. If one of the documents above was already submitted or is included with the RAW, then the receptor information is already part of the evaluation for further review. Additionally, all sites with new construction/change in use to school, child care or residential will be reviewed regardless of other receptors.

The first information needed to decide whether further review of a RAW document is necessary is to determine if any remediation was initiated after May 7, 2010 at a site or area of concern where new construction is proposed for residential purposes, for use as a licensed child care center or as a public school, private school, or charter school, or for any remediation initiated after May 7, 2010 at a site or area of concern where there will be a change in the use of the site to residential, child care, or public school, private school, or charter school purposes or another purpose that involves use by a sensitive population. These uses all involve sensitive populations that are required to use a presumptive remedy, an unrestricted use remedy, or a pre-approved alternative remedy. This information can be found in Section E of the Remedial Action Workplan Form.

If the remedy for this population of cases is one of the presumptive remedies or the remedy will result in an unrestricted use RAO for all media, then the report would not be selected for additional review for the proposed soil remediation. This information can be found on Section E question 3 of the Remedial Action Workplan Form.

If the LSRP is proposing an alternative remedy for one or more contaminated areas of concern, then the report will be selected for a comprehensive review of the proposed alternative remedy. This remedy must be approved in writing. This information can be found on Section E question 4 of the Remedial Action Workplan Form.

For cases that are required to uses presumptive remedies, if the LSRP is not proposing an unrestricted use remedy or a presumptive remedy and is not proposing an alternative remedy, this is a violation of the Site Remediation Reform Act. This situation will be evident by examining Section E of the Remedial Action Workplan Form. The report should be segregated for additional review. The LSRP/RP must be notified immediately to stop work because they are out of compliance.

\*NOTE: Presumptive Remedies and Alternate Remedies do not apply to ground water remediation.

### **Site use other than Post-May 7, 2010 Schools, Child Care Centers, Residential**

If the site use is something other than new construction/change in use to school/child care/residential, or if the school/child care/residential construction/change in use started prior to May 7, 2010, check to see if the site contains radionuclides, Ordnance and Explosives/unexploded ordnance (OE/UXO), or chromate production wastes. The

information regarding radionuclides and OE/UXO is found on section E, questions 5 and 6 of the Remedial Action Workplan Form. The information regarding chromate production wastes is found on Section F question 3, under the soils heading of the Remedial Action Workplan Form. If so, transfer the documents to a specialized group for review.

If the review of the report will remain in your office then it is necessary to determine if the site will be rendered unusable by checking section E question 10. If they are proposing to make the site unusable then a component review of the report should be conducted.

If the LSRP chooses a presumptive remedy, which is protective for a school, child care center or residence, additional review of the soil remediation is unnecessary.

\*NOTE: Presumptive Remedies do not apply to ground water remediation.

If the LSRP is not choosing a presumptive remedy or if ground water remediation is being proposed, check to see if there are any changes to the receptor evaluation form. The receptor evaluation form may be resubmitted with additional information as the Remedial Investigation progresses or due to receptor changes surrounding the site. This action point is in order to catch any sites where changes to receptors have occurred. If new receptors are identified, assign the document for a component or general review.

Next, look for any sites where the seven pullouts from the Remedial Investigation flowchart have been identified. The seven pullouts are:

1. Are ecological impact identified in question F2 of the Receptor Evaluation Report?
2. Is Impacted Class I Groundwater identified in F1 and the second question in H of the Remedial Action Work Plan Form?
3. Has any response been indicated in D3 of the Receptor Form?
4. Are there receptors for VI identified in E2 or E3 of the Receptor Form?
5. Is Arsenic, Dioxin, Mercury or PCBs present in sediments above ecological screening levels As specified in E8 of the Remedial Action Work Plan Form?
6. Is anything other than "Default" checked in H of the Remedial Action Work Plan Form?
7. Has soil contamination due to naturally occurring background conditions been identified in the soil column in question 3 section F.

If a component review for the seven pullouts was not conducted for the Remedial Investigation document, assign the report for a component review.

Next, based on your experience and the information on the forms, determine if the remedy seems appropriate for the contaminants and site conditions. If any items concern you, target them for a component review. If information seems inconsistent then refer the report for a general or a comprehensive review. Check over the DN and CEA. Check for remedies that do not address the listed contaminants of concern, or are not effective for

✓  
Aren't they  
beyond a general  
review already?

the media that is contaminated. Check the receptor evaluation form and refer to verify that the remedy is protective of all of the receptors.

OSC and PBR activities should be pulled out for specialized review (BGWPA).

For documents that have come to this point in the flow chart, there is no additional review.

## Remedial Action Report Unrestricted Use

The first step in reviewing the remedial action report is to determine if they are proposing an unrestricted or a restricted final outcome. To determine this you must check the chart in section F. If anything is indicated to be above standards then it should be a restricted use. In addition check questions J soils 4 and J groundwater 2, which specifically ask if the remedy is a restricted use.

If it is an unrestricted use then it is necessary to determine if it is the first time this area of concern or site is being submitted. These should be areas of concern/ discharges that were remediated in less than 9 months. Section B of the Remedial Action Report form asks if any previous document was submitted.

If one of the following scenarios occurred for an initial report then a general review of the report should be conducted:

1. Check section C of the Remedial Action Report form to determine if the Current or Future Use of the site is school, child care center, residence or park/recreational area.
2. Check the Case Inventory document to determine if ground water remediation was necessary.
3. Check the Case Inventory document to determine if soil remediation other than excavation was necessary.

If this is not the first submittal, then it is necessary to determine if there are sensitive receptors specified on B1 of the receptor evaluation form, if a potable well was indicated in section D of the receptor evaluation form or if future use may be residential, school, child care, park/recreation on C of Remedial Action Report Form. If it involves a sensitive population and a ground water remediation was necessary (which can be determined by reviewing the Case Inventory document) then a general review should be conducted. If ground water remediation was not needed and soil remediation was excavation then no further review was needed. If soil remediation was soil blending as indicated on question 4, Section I, then a component review of the soil blending should be conducted. If any other soil remediation was performed then a general review should be conducted.

If a sensitive population was not at/near the site then it is necessary to determine if a variance to the regulations was issued by checking section G of the remedial action report form. It is also necessary to check if an alternative remediation standard was used by checking section H of the Remedial action report form. If either of these items have been reviewed previously then it is not necessary to review them again. If not, then a component review should be conducted. The inspector should evaluate the actual deviation from the regulations and may determine that additional review is not needed.

If any of the following conditions apply then a component review should be conducted to determine why they are proposing an unrestricted use RAO.

1. Does contamination remain above the Standard/screening levels pursuant to Section F of the RAR form?
2. Were the MDL's above the standards/screening levels pursuant to Section F of the RAR form?
3. Was an application made for a remedial action permit (CEA or DN)?
4. Was the answer "yes" selected in Section I, questions 1-3?

These are all scenarios that should not exist for an unrestricted use.

If these scenarios don't exist then no additional review is needed.

## **Remedial Action Report** **Restricted Use**

Please note that both the CEA and the Deed Notice portions of this flow chart refer back to each other because a CEA and a Deed Notice can occur simultaneously at a site.

The LSRP must obtain separate Remedial Action Permits for either the CEA or Deed Notice. The permits must be approved prior to the LSRP issuing an RAO. The permits will be reviewed and approved by Wayne Howitz. Wayne Howitz will also update the appropriate fields in NJEMS.

If a CEA is required and will not result in an RAO (ie pump and treat systems), the LSRP must apply for the CEA. The BGWPA will review and issue a CEA approval letter.

If a CEA has been approved for this site, it is necessary to determine if there are any receptors in or proximate to the CEA. This can be determined by looking at the Case Inventory Document map and the receptor evaluation form. If there are receptors, then a component review should be conducted.

If a Deed Notice has been approved for this site then it is necessary to determine if any changes occurred from the Deed Notice that was proposed and what was actually built. This can be determined by looking at the Case Inventory Document. If changes were made then a component review should be conducted.

## RAO

The first thing that must be considered is whether all past review issues have been resolved. NJEMS must be checked to determine this. If not, then a general review of this issue, which may include reviewing previous submissions, is required.

The next thing to consider is whether all bills have been paid. A component review of all of the billing issues should be conducted to resolve any outstanding issues.

If it is a restricted use RAO, it is necessary to determine if the site is being rendered unusable and if a remedial action permit (CEA/DN) was issued. A component review should be conducted if the site is being rendered unusable or if a remedial action permit had not been issued yet.

It is important check the Case Inventory Document to ensure that all areas of concern that were identified in the Preliminary Assessment/Site Investigation have been addressed and that all AOC's identified in the RAO are indicated as being closed in the CID. A component review may be required to resolve any outstanding issues.

## Remediation in Progress Waivers

A general review of all ISRA Remediation in Progress Waivers must be done by a reviewer.

An applicant may receive an ISRA Remediation in Progress Waiver if all of the following apply:

1. The site is subject to ongoing remediation by a prior owner or operator. This is verified by a check of NJEMS for enforcement actions and checking with the case manager for the lead case to verify enforcement is not on the immediate horizon. If the lead case is being remediated under the LSRP program, a statement must be submitted by the case applying for the ISRA Remediation in Progress Waiver that the remediation of the site is ongoing and that there are no existing enforcement actions.
2. The prior owner or operator has established a remediation funding source in accordance with N.J.A.C. 7:26C-7 adequate to cover the cost of the remediation. This should have been done by the applicant seeking the waiver but we check because many times the RFS is inadequate. The RFS is subject to an annual review and should be increased whenever the amount of the cost of the remediation exceeds to current RFS. The current RFS amount is posted in NJEMS in the financial field. Verify, if possible, with the case manager if this will cover the cost to remediate the site. If the RFS is not adequate to cover the remediation, the waiver is denied until the RFS is increased.
3. The applicant submits the ISRA Alternate Compliance Options form with the RIP waiver section completed which certifies that there have been no discharges of a hazardous substance or waste during their operation. This is supported by the submission of an LSRP certified PA or PA/SI. **OR**

The applicant submits the ISRA Alternate Compliance Options form with the RIP waiver section completed which certifies that any discharges they had during their period of operation have been remediated. This is supported by submission of a DEP NFA or LSRP issued RAO for the discharge and a LSRP certified PA or PA/SI for the rest of the site.

### Regulated Underground Storage Tank Waivers

A general review of all Regulated Underground Storage Tank Waivers must be done by a reviewer.

To qualify for a UST Waiver, the applicant must meet all of the following:

1. Submit a LSRP certified PA or PA/SI with the ISRA Alternate Compliance Options form with the UST waiver section completed that certifies either:
  - a. the only area of concern at the site is from a regulated UST(s) and the RP is in compliance with the UST laws **OR**
  - b. the only area of contamination at the site is from a regulated UST and the RP is remediating the discharge under the UST laws.
2. Submit a copy of an active certificate of financial responsibility that covers the number of regulated USTs at the site.
3. If the site was sold pre submission of the PA or PA/SI, NJEMS should reflect in activity tracking under the GIN Grey Bar that a Remediation Certificate is in place and an ISRA RFS was established.

